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**COOPERATIVE MARKETING AND PRICE
CONTROL**

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BULLETIN NO. 271

Cooperative Marketing and Price Control

By O. B. JESNESS

The farmer is confronted with economic as well as technical problems. In order to succeed he needs to know more than how to grow crops and raise livestock. He must know something about the economic side before he can select the proper combinations of farm enterprises under different conditions. He must know about market outlets and prices. If he is to plan his production properly he must give consideration to probable future market conditions. Agriculture is a business that needs to pay attention to the marketing of its output as well as to its production. This is recognized everywhere at present. In fact, it is often said that the farmer knows all about production and what he now needs to do is to pay attention to marketing. The idea back of this statement relates to the farmers' knowledge of technical problems of production. These, however, constitute only part of the total. Farmers do not know all about them but, even if they did, that alone would not be all that is necessary. It would be better to say that the farmers need to pay more attention to marketing without paying less attention to production.

The production¹ and marketing aspects of the farmer's job are inseparably linked. A line cannot be drawn thru it so that everything on one side will relate only to production and on the other to marketing. The way in which a product is produced has much to do with its quality and consequently with its sale. The amount of a commodity produced is an important factor in determining market prices. The farmer needs to produce with his market in mind. Only in this way will the kind and quality

¹The term "production" is employed in this bulletin in the sense commonly used in referring to agriculture. When the term is understood in its broad sense, marketing is a part of production.

of products wanted by the markets be supplied in proper amounts and only when the markets are thus supplied are the best results obtained.

SERVICES IN MARKETING

Farming involves a number of different kinds of work. So does marketing. In other words, marketing consists of a series of services which are performed in getting products from the farm to the consumer and making payments for them. Among the services may be mentioned:

Assembling.—The locating of sources of supply and bringing together of products from farms at local shipping points and from local points to larger markets in anticipation of the consumers' needs.

Grading.—A grade is a measure of quality like weight is a measure of quantity. Products frequently are sold on the basis of grades and the grade of specific lots must be determined. Many products also are sorted or rehandled so as to improve upon the grade and uniformity. As examples may be mentioned the grading of tobacco, the sorting of potatoes and the candling and grading of eggs.

Packaging.—Placing products in packages as, for instance, tobacco in hogsheads, cotton in bales, eggs in cases and apples in barrels.

Transporting.—Most farm products are marketed at a distance from the place of production, making transportation a necessary part of the marketing process. Without this service the farmer for the most part could produce only for the local market. Consumers would have to depend mainly upon local supplies and their selection would be limited to fewer kinds. Specialized agricultural regions and large cities could not have attained their present development without transportation.

Manufacturing and Processing.—Most agricultural products are raw materials. Wheat is milled; livestock is slaughtered; wool and cotton are made into cloth; tobacco is made into cigarettes, cigars, chewing and smoking tobacco and snuff; cream

is churned into butter; poultry is dressed, and fruits and vegetables may be canned or dried.

Storing.—Because the farming business is seasonal, storage is needed to carry products from the period of harvest or surplus production until needed.

Distributing.—There are over 100 million consumers in this country and agricultural products assembled from over 6 million farms must be distributed to the consumers who require a constant supply of a large variety of products.

Financing.—Capital is required for moving farm products, for holding them in storage, and for the equipment and labor needed to handle, store, transport and manufacture them.

Risk Taking.—Risks are involved in marketing and must be carried by some one. They include risks from spoilage, fire, weather damage and handling, as well as risks caused by market fluctuations.

Salesmanship.—Markets must be located, market information obtained and bargaining employed in various steps of the marketing process.

IMPROVEMENTS IN MARKETING

Obviously, if marketing involves a number of necessary services, improvements will come about from finding better and more economical methods of performing such services and not by attempting to do away with them. Frequently it is assumed that the best way to improve marketing is by the elimination of middlemen. The important question is not the number of classes of middlemen between the farmer and the consumer, but is whether or not the necessary services are performed in the best and most economical way from the standpoints of the producer and the consumer. In pioneer days the principal outlet for farm products was the farm home itself and nearby consumers. With the development of industries, transportation, specialized agriculture and large cities, farming has changed from a self-sufficing to a commercial undertaking. The farmer and the ultimate consumer usually are far apart. Many services are performed better by some one else than the farmer himself. Middlemen

have come into the marketing system because there is work for them to do. They cannot all be eliminated without putting something in their places to perform the necessary marketing services which now are being rendered by them.

Quality and Uniformity.—The quality and uniformity of products have a great deal to do with the results obtained in marketing. There is much room for improvement in this regard in the case of farm products. For instance, more careful grading of tobacco often means a considerable increase in the prices received. Quotations of livestock markets showing higher prices being paid for choice, prime and good steers than for common, and for lamb markets showing decidedly better returns for tops than for seconds, are illustrations of the importance of quality. A market report for a day selected at random in August, 1926, showed the wholesale price of 93 score butter in the New York market to be 43 cents, while 90 score was worth 40½ cents and 87 score only 37 cents. The 93 score butter requires high quality cream. Creameries receiving cream of such quality that their butter is low-scoring cannot afford to pay the farmers as much for butterfat as creameries which receive sweet cream. Similar illustrations may be cited for many other farm products. It is therefore important that the farmer give attention to everything which maintains or improves the quality of his products.

The existing marketing system, especially in buying products at country points from farmers, does not always discriminate sufficiently in the prices paid for products of different grades. Improvements are being made gradually. For instance, in the case of burley tobacco, the establishment of the Burley Tobacco Growers' Cooperative Association has led to the sale of the tobacco delivered to it on a definite grade basis so that quality is rewarded. The purchase of cream on a grade basis makes it worth while for farmers to produce higher quality cream. Buying of eggs according to grade is followed in some sections and is being extended.

Information.—There is need for greater use of crop and market information by both farmers and dealers. Production needs to be kept adjusted to market requirements. Farming is

a business in which it is important to look ahead to see what the future has in store. Much has been said about "orderly marketing;" "orderly production" is equally important. A marketing system, no matter how efficient, can not be expected to sell at favorable prices more of a product than the buyers are willing to take at such prices. Economy in distribution requires that the products be sent as directly as possible to the places where they are wanted and at the time they are wanted there.

FARMING COMPARED WITH OTHER INDUSTRIES

Comparisons frequently are made to show that other interests are organized much more completely than agriculture. Such comparisons usually fail to give due consideration to differences between industries. Farming is being carried on by comparatively small units, the individual farm, while many manufacturing enterprises are operated by large business organizations. The real explanation of this difference is that farming is conducted most successfully by small units while many lines of manufacturing are carried on most economically when they are on a large scale. Manufacturing operations are carried on in a more restricted area, more machinery can be used and greater specialization and division of labor are possible. Industry tends to be more specialized than agriculture, each plant turning out a certain product, or a few related products. The farm, on the other hand, usually makes the best use of its factors of production when it produces a variety of crops, livestock and livestock products. Specialization and division of labor can not be carried to the same extent on the farm as in the factory. As a consequence, individual production is the rule in farming and organized production in manufacturing.

Organized selling, however, is adapted in certain instances to farm products as well as to manufactured products. If the farmer is to take advantage of this fact, he must market thru organizations established by others, or else unite with other farmers in organizations for this particular purpose.

Comparisons of organizations in agriculture and in other lines often are not carried far enough to bring out the real dif-

ferences. A cooperative marketing organization of tobacco growers is not comparable to a large manufacturing corporation. The former sells tobacco, leaving the production to the individual growers. The factory, on the other hand, is itself the producer of the commodity it sells. The two would be similar only if the tobacco association raised the tobacco which it sells or the manufacturing concern consisted of small independent producing units with a central sales organization. This is an important distinction to keep in mind in comparing cooperative marketing with factory organizations.

The farmers' marketing organization also differs from labor unions, or organizations of doctors, lawyers, bankers or retailers. The marketing association actually handles products and money belonging to the members. The other organizations referred to are merely general associations. The labor union bargains with employers in matters of wage and working conditions, but it does not hire out its members or collect their pay for them. The medical association may carry on an interchange of ideas and experience among its members but leaves each member to conduct his own practice. The city board of commerce serves in connection with civic and business problems of mutual interest to its members but does not attempt to buy or sell goods for them. These bodies resemble general farmers' associations such as the Grange, the Farmers' Union and the Farm Bureau, much more than they do cooperative marketing associations.

POSSIBILITIES OF COOPERATIVE MARKETING

Because marketing consists of the performance of services, the field of cooperative marketing lies in rendering some of these services and doing so more effectively and economically than does private endeavor. The nature of the services assumed depends upon the organization, the commodity and the market. Quality improvement frequently is a very valuable service of cooperative marketing associations. Many illustrations of this type of service are available, including the organized activities of citrus fruit growers of California, creameries of the North Central states, potato growers of the Eastern Shore of Virginia, cran-

berry producers, egg producers and others. Denmark often is cited as a leader in cooperative developments, but many fail to appreciate the extent to which the success of cooperative butter, egg and bacon selling organizations of Denmark rests upon the influence which these associations are exercising over quality and uniformity.

Closely linked with the question of quality improvement is the sale on the basis of uniform grades and settlement with members on that basis. Cooperative tobacco marketing associations, thru the adoption and use of definite grades, are rendering a distinct service to the members and are furnishing a stimulus to better sorting and handling so as to obtain higher quality and uniformity.

The larger volume of business of an association enables the employment of trained help so that the member is supplied with the services of salesmanship. The individual farmer lacks the time and means for obtaining complete market information as a guide in determining when and where to sell. An association is in a better position to obtain such information and to make use of it after it has been obtained.

The farmer is not always on an equal plane with the buyers of his product in bargaining strength. This is especially true in the case of products having outlets which are concentrated in the hands of relatively few buyers. A cooperative association may aid the farmer in overcoming this handicap so that there may be greater assurance that his products will be paid for in accordance with actual market conditions.

RELATIONSHIP TO PRICE

In connection with a recent survey¹ of membership problems in large cooperatives, 462 members of cotton and tobacco associations were asked to state the main reason why they joined their association. Of this number 236 indicated specifically that it was for the purpose of getting better prices. A large proportion of the others gave such answers as "Low prices at the

¹ Made by the Kentucky Agricultural Experiment Station and the Bureau of Agricultural Economics, U. S. Department of Agriculture. See U. S. Department of Agriculture Circular 407, "Membership Relations of Cooperative Associations."

time of joining," and "Dissatisfaction with the existing system," suggesting that the desire for better prices for their products was the motive for becoming members. This is to be expected as cooperative marketing is a business undertaking having for its purpose to make the farming operations of the members more profitable. Cooperative marketing as a consequence has a close relationship to price. Prices to farmers may be improved in two ways, one, by reducing the spread between the farmer's price and that paid by the consumer so that the farmer will receive a larger share, and the other by raising the price paid by the consumer.

Price Fixing.—The idea that farmers can fix prices by organizing is popular. In connection with the membership survey mentioned above, the members interviewed were asked if they thought cooperatives would be able to fix prices. Of the 398 members who gave their opinion on this point, 139 replied in the affirmative, while 127 others gave an affirmative answer with the qualification that a sufficient percentage of control must be obtained before this is possible. Thus 266 of the 398 indicated a belief in price control. A negative answer was given by 105 members. Of the other answers, 14 were doubtful, 10 indicated the conclusion that cooperatives had fixed prices and 3 that they could do so to some extent.

The limitations of a local cooperative association in fixing prices are well understood. Its influence on prices depends upon its ability to improve grade and quality, to find better outlets and to reduce the spread between the producer and consumer by more efficient operation or by narrowing dealers' margins thru competition. The limitations of the larger organizations have not been understood as fully. Large-scale organization among farmers has received considerable impetus from the belief that this would enable farmers to fix their selling prices. It is often said that "everyone except the farmer fixes the prices on his products." Frequently it is concluded that farmers do not fix their selling prices because they have not organized sufficiently. This line of reasoning has played such a prominent part

in organizing tobacco growers and other farmers for marketing purposes that a careful examination of it is worth while.

If the phrase, "fixing of prices," is meant to convey the idea of arbitrary control of prices, it does not take long to discover that everyone does not fix his prices. A manufacturer or dealer may mark the selling price on the tag but that does not mean that he will receive that price. Usually the price he can obtain is fixed for him mainly by forces beyond his control. Factors of supply and demand influence prices of all products and consequently cannot be disregarded by any line of industry. Concerns which have monopoly control can adjust supply so that the most profitable prices will be obtained, but instances of real monopoly are not nearly as common as it is popularly believed. Most business concerns are faced with competition from other concerns in the same line as well as from other products of a competitive nature.

Cost of Production and Price.—There is a great deal of misconception regarding the relation of cost of production to market price. It is a popular belief that prices for farm products can be based directly upon cost of production. For instance, one of the questions asked members of tobacco and cotton associations sought information as to whether cooperatives should be able to get prices based on cost of production. Out of 381 replies, 268 were in the affirmative, 96 were negative and 17 doubtful. Thus, fully 70 per cent of those who expressed an opinion, indicated that they regarded production costs as a proper basis for prices.

What are the difficulties in the way of basing prices on production costs? They fall into two groups: One relating to the determination and selection of costs, and the other relating to keeping market prices in definite relationship to costs. The determination of the exact cost of producing a specific farm product, even on a single farm, is difficult. Most farmers produce a variety of products, making it hard to determine the exact proportion of certain costs which is chargeable to certain crops. Even if costs on individual farms can be arrived at with a fair degree of accuracy, the costs for different farms vary widely.

Whose cost is to be used as a basis for prices? If the average cost is used, one-half will be produced at a higher cost. The highest cost usually is an extreme one and would result in an unreasonably high price. A cost somewhere between might be selected, but the proper cost cannot be determined arbitrarily.

After a cost has been decided upon the problem of obtaining a price in line with that cost still remains. What if the resulting price is so high that some of the product remains unsold? What if it is so high that production is expanded to a point where there is an excess above market needs? Cost of production is not without effect but it is not the only factor affecting price. As a matter of fact the effect of cost upon price is made known thru its effect on supply. If the price of a product drops to a point where the cost of production of some of the producers is not covered or where some producers will find it more profitable to substitute other products, the future supply will be lowered. On the other hand, if the price is too high, production will be stimulated and the future supply increased. In the long run, the price paid the farmer for a product will have to average high enough to cover the cost of production of the supply which the market requires. At any particular time, however, there may be a considerable difference between the cost of production and the market price, because other factors than long-time supply influence prices. Demand may be stimulated as was illustrated by the burley tobacco market during the war period and for a year or two afterwards, and market prices may go much higher than production costs. A period of depression may occur and prices may fall considerably below the costs of many producers. The latter was the case in the sale of the 1920 crop of burley tobacco.

Price Changes.—On the whole, agricultural prices since 1920 have been relatively lower than the prices for non-agricultural products. Considering averages may lead to the mistake of generalizing too much and to the conclusion that all agricultural products have fared worse than all industrial products. As a matter of fact, there are wide variations among different products both in agriculture and industry. This is well illus-

trated by the wholesale price indexes prepared by the Bureau of Labor Statistics, United States Department of Labor. Using 100 as representing the wholesale prices in 1913, the various groups of commodities showed the following index numbers in July, 1926:

Farm products	140.8
Foods	153.6
Clothing materials	173.3
Fuels	177.0
Metals and metal products	126.2
Building materials	171.5
Chemicals and drugs	130.9
Housefurnishing goods	161.1
Miscellaneous	122.5
All commodities	150.7

Shifts take place constantly in price and in relationships. At one time one product may be in a favored position, at another time that position may be occupied by another. This applies to agricultural products as well. The prices of lambs during the past few years have been much better than the prices of cattle. Wool has brought relatively higher prices than wheat. Conditions constantly change. Corn and hogs supply an excellent illustration. At average farm prices in June, 1925, only 9.7 bushels of corn were required to buy 100 pounds of live hogs. In June, 1926, it required 18.7 bu., or almost twice as much as twelve months before.

Adjustment of Production.—Some who readily admit that supply and demand conditions are important in price determination suggest that manufacturers avoid unprofitable prices by curtailing production whenever an oversupply is threatened. While there are many exceptions, there is considerable merit to this contention. It is clear that at a given profitable price, the greater the production, the larger the profits will be. If production has to be curtailed in order to maintain that price, profits will be lowered. This is merely an instance of adjusting supply to demand. Such adjustment to avoid or correct an unbalanced market condition is desirable, but in agriculture it must be taken care of by the individual farmer.

Differences in the extent of organization may explain in part why some lines of manufacturing tend to adjust themselves more quickly to changed conditions than agriculture. But there are other differences as well. A comparison of production on the farm with that in the factory will suggest some of them. The farmer determines the acreage to be devoted to a certain crop but production may vary widely from year to year on a given acreage. Temperature, rainfall, insect and disease pests influence agricultural production materially. The factory has more control over the conditions surrounding production than has agriculture. The farmer's business is a long-time proposition. If he has spent years in building up a herd or an orchard, he can not afford to break up the herd or cut down the orchard in order to curtail production because of a temporary oversupply. He can not rearrange his system of farming without serious disturbances to rotations and cropping plans. There is no stopping in mid-season after a crop is in the ground, even if an oversupply may be threatened. The owner of a flock of sheep must let the flock keep on growing wool even if the market outlook may be poor. He can not have it stop producing for a month, or two, or three, and then start up again when conditions are favorable. A woolen mill unable to sell its goods will soon have to shut down or curtail operations until market conditions improve. The average manufacturer can not continue to operate very long at a price that is lower than his cost of production. He hires his labor and has a payroll to meet. On many farms, all or most of the work is done by the farmer and his family and the farm may continue to be operated in times when prices are such that there is little or no return for the labor involved. Readjustments thus may be forced more quickly in manufacturing than in farming. These are due to the nature of different lines of work and not merely to the extent to which industries are organized.

Organized production in other lines, however, is an aid to the making of adjustments. There are fewer individuals involved in arriving at decisions. The large volume of business also makes it possible to study the future closely as a basis for present operations. But let us not forget that this is largely a benefit of or-

ganized production, not of organized selling. Cooperative marketing does not equip the farmer to do the same because it is not organized production, it is organized selling. The marketing organization necessarily leaves control of production with the individual grower. In the case of temporary oversupply of a non-perishable product, a marketing association may render valuable service by adjusting the time of sale accordingly. But the individual member should appreciate that the problem of adjusting production to market requirements belongs to him and his fellow farmers, not to his marketing organization. The latter can help him by supplying information on the future outlook, but this is effective only when the farmers translate this information into action on their individual farms.

ORDERLY MARKETING

Much emphasis has been placed in recent years on the results which cooperative associations are expected to obtain from the employment of "orderly marketing." This expression may be used from two different viewpoints, one involving distribution as to place, the other as to time. Place distribution is particularly important in the case of highly perishable products which are produced in localized areas and therefore require wide distribution among many markets. Maintaining proper volume of supply among the different markets is important. However, the term "orderly marketing" usually is employed in referring to the time of sale rather than place. The idea back of this use of it is not always clear. Some seem to believe that farmers generally have been following the practice of throwing their products upon the market at harvest time or soon thereafter and that they have suffered great losses from so doing. Many farmers follow such a practice, but the assumption that prices always are much lower at that time than they are later in the season is not supported by facts. A recent bulletin¹ of the United States Department of Agriculture makes the following statement regarding cotton prices: "A study of the average prices received by farmers on the first of each month since 1913-14 indicates no pos-

¹ Department Bulletin No. 1302. "Cooperative Marketing of Cotton." P. 29.

itive price advantage to farmers who consistently hold their cotton until December." Studies of wheat prices for a period of years show that a similar conclusion for that commodity is justified. Studies of potato prices show that in some years the price trend is upward as the season advances, while in other years it is downward.¹ On the average for a period of years, the prices for products which must be carried over from season of harvest or surplus production until they are needed, must show an increase sufficient to cover carrying costs, otherwise no one would care to render this service. If large profits were obtainable from so doing, so many people would engage in holding that a change would soon occur.

A Complex Problem.—Effective marketing requires more than merely holding back a commodity for sale in the latter part of the season. It is more involved than selling a certain proportion of a crop each week or month of the year. Demand is far from being uniform. Successful marketing requires the distribution of products in accordance with both supply and demand. More rapid marketing may be desirable under some circumstances and more gradual marketing may be warranted in other cases. While on the average for a period of years, spring prices for such products as cotton, wheat and potatoes, may be only sufficiently higher than fall prices to cover carrying costs, the relationship for any single year may differ widely from the average. In short, good marketing requires constant adjustment to ever-changing conditions.

PRICE AND PRODUCTION

Price is an organizer of activity. Producers are price sensitive and they tend to adjust their production to take advantage of lines which show profitable returns. There is ample proof that farmers are doing this constantly. Hogs furnish a well known example. When hogs are high in price, production is increased. This is carried to the extent that the supplies become so large that prices fall to a point where production is discouraged. The lower supplies following again bring an upturn in

¹ See, for instance, Minnesota Experiment Station Technical Bulletin No. 29, "Factors Affecting the Price of Minnesota Potatoes."

prices. The result is that hog prices move in cycles or waves. Cotton growers respond to price to the extent that cotton acreage shows a marked tendency to follow the price being received for the previous crop. The high prices of burley tobacco during the war period led to expansion in acreage until the market broke disastrously in the sale of the very large crop of 1920. The acreage of burley in 1920 was estimated at 356,000 acres. The low prices received for that crop brought the acreage in 1921 down to 259,000 acres. The improved prices for that crop were followed by an increase in acreage in 1922 to 321,100 acres, and the continuing favorable prices brought the record acreage in 1923 of 369,600. A large potato crop with resultant low prices tends to be followed by a year in which acreage is curtailed. Price thus affects future production and as a consequence, future market supply.

Basis of an Association's Price Policy.—Some cooperative organizations handle products for which there are well established markets and for which adequate market quotations are available. Thus, associations handling such products as cotton, livestock or grain follow the prices in the markets and sell on the basis of those prices. For a few products, markets of this kind are largely lacking and an organization that is a considerable factor in handling such a product, may have to take the lead in arriving at the prices it will ask for its products. Tobacco falls into this class. The tobacco associations must determine upon their asking prices. What should guide them in doing this? Should they decide that a certain price is necessary to cover cost of production and a profit and then stick to that price? Should they decide to ask certain prices because the buyers of their product are prosperous and consequently able to pay those prices? The association is formed to get better prices. The temptation is to seek highly profitable prices. The price sought, however, must be the one that will keep production and demand in line. A price higher than that will stimulate production, increase the carry-over, delay settlements and sooner or later a lowering of price must take place and when that happens it is likely to fall lower than it otherwise would, until the accumu-

lated surplus has been used. What has been believed to be "orderly marketing" may turn out to have been merely speculative holding for an unnatural price. The best returns in the long run will come from finding the proper price as soon as possible. An overexpansion of acreage is definite notice of the need for a lowering of price.

The raisin growers and the prune growers of California at one time were considered as examples of the way in which co-operative organizations by gaining control of the commodity could maintain high prices. The following table shows the volume of business and the price paid by the Sun-Maid Raisin Growers to its members for a period of years.¹

Year	Tons Handled	Price per pound to growers cents
1912	24,512	3.059
1913	59,228	3.609
1914	73,635	3.561
1915	98,405	3.846
1916	107,039	4.793
1917	127,212	5.499
1918	149,713	5.520
1919	159,262	11.410
1920	152,497	12.695
1921	123,665	7.280
1922	204,630	3.214

These figures show that even a commodity produced in a localized area and one for which it is possible to influence demand thru advertising, does not lend itself to arbitrary price control.

The experience of the California Prune and Apricot Growers' Association furnishes additional proof in support of this conclusion. This association entered the 1923 selling season with considerable carry-overs of prunes and apricots from the 1922 crop. The general manager of the association has expressed himself as follows with regard to the effects of such a condition:

¹ Data taken from U. S. Department of Agriculture Bulletin 1302. "Development and Present Status of Farmers' Cooperative Business Organizations." Comparative data for years since 1922 are not available.

"We have sustained a loss each season that we have had a carry-over and these losses will be continued as long as we permit carry-overs to interfere with the sale of the following season's crop. Had our 1922 crop been disposed of and the markets of the country cleared not later than September 1st, 1923, the current crop would have returned the grower far more additional money than was actually secured for the 1922 carry-over sold subsequent to September 1st."¹

This conclusion can not be applied literally to all farm products. Carry-overs from one season to the next are necessary for some products. Thus, in the case of tobacco, a large carry-over from one year to another is customary. The principle still holds as caution must be exercised to keep carry-overs from becoming unduly large. The following table shows the estimated production of burley tobacco and the stocks of burley leaf reported in the hands of manufacturers and dealers on October 1, for a number of years past:

Year	Estimated Production lbs.	Stocks on October 1 ² lbs.	Apparent Consumption for year Beginning October 1 lbs.
1912	196,080,000	215,307,012	186,188,357
1913	176,776,000	225,198,655	198,302,638
1914	224,664,000	203,672,017	178,532,440
1915	217,338,000	249,803,577	267,820,412
1916	257,050,000	199,321,165	248,777,511
1917	251,520,000	207,593,654	268,976,635
1918	269,088,000	190,137,019	229,334,459
1919	277,650,000	229,890,560	239,751,071
1920	315,259,000	267,789,489	258,697,332
1921	220,849,000	324,351,157	264,343,840
1922	275,601,000	280,856,317	213,572,557
1923	329,504,000	342,884,760	244,056,754
1924	299,200,000	428,332,006	268,444,778
1925	275,146,000	459,087,228	268,196,533
1926	312,630,000	466,036,695	

¹ Annual Report of the General Manager of the California Prune and Apricot Growers' Association for year ending May 14, 1924.

² Tobacco manufacturers and dealers are required by law to report to the Bureau of the Census their holdings of leaf tobacco on January 1, April 1, July 1 and October 1, of each year. These reports indicate the type of leaf but not the grade.

The stocks on October 1 consist of tobacco held over from previous years as delivery of the current year's production has not started on that date. Whether or not carry-overs are getting out of line can be judged by comparing stocks from year to year with the production. Definite figures on tobacco consumption are not available by types. The figures in the accompanying table under the heading "Apparent Consumption" have been obtained by adding to the stocks on hand on October 1 of each year, the estimated production for that year and subtracting from the total the stocks on October 1 the following year. Due to possible errors in the estimates of production and variations in the size of stocks because of variations in holdings of leaf by those not required to report their stocks, these figures do not represent the exact consumption. They serve as an indicator of the probable consumption.

The figures reveal that production has been large during recent years. The definite upward trend in the stocks on hand since 1922 shows clearly that the expansion in production has not been accompanied by a corresponding increase in consumption. Obviously, production can not continue indefinitely to exceed consumption. Either consumption must be increased to take care of the expanded production and the accumulated excess in the stocks, or production must be curtailed until it is back in line with consumption and until stocks have been reduced.

Price Must Maintain Balance.—The conclusion may therefore be drawn that organizations which have it in their power to name their asking price should seek to find the price which will maintain a proper balance between production and consumption. For some non-perishable products, it may be possible to hold prices at a higher level for a time but this inevitably stimulates production and creates a surplus. Such prices cause extensions in the producing areas, encourage the farmers to produce those commodities and disturb the balance between farming enterprises. Unless a corresponding increase in consumption occurs there eventually must be a period of lower production until the excess stocks have been consumed. This readjustment causes many difficulties for the agriculture of the section involved and

may mean actual hardship for some who have placed too much reliance on the hope that the artificial price could be maintained permanently. In the long run, therefore, the industry is best served by finding the proper price as soon as possible.

The reasonable view of cooperative marketing is that it gets results for its members by performing services, by distributing products better and more economically, by getting full market value and not by attempting to fix prices on an arbitrary basis or to hold prices at an artificial level in disregard of actual market conditions.

MEASURING RESULTS

If cooperative associations could fix prices on some arbitrary basis and obtain such prices without at the same time raising the prices paid to non-member growers, it would be easy for members to measure the results obtained. Simple price comparisons would suffice. But the problem is not that easy. As was pointed out earlier in this bulletin, many members think cooperative organization means control over prices. It is highly important that members understand the relationship of their organization to prices and the limitations upon organized price control.

Members sometimes feel that growers who have remained outside have reaped the benefits of the organization without contributing to its support. This is most often true in the instance of organizations which occupy a sufficiently prominent place in the marketing of a certain commodity to give them considerable temporary control over prices. Prices inside and outside of an organization often are hard to compare. Non-members frequently will obtain some benefits. Members who desire to withdraw on this account need to bear in mind that if everyone should do so there would be no organization and consequently no benefits.

The members should measure the value of their organization by the services it performs for them rather than by the benefits it may give others. Are the results obtained by the organization better than those which the individual members would have obtained without an organization? Is the organization improving upon marketing methods? Are returns better with an organiza-

tion than without? Has it improved grade and quality? Is it preventing discrimination among members and giving each fairer treatment than he otherwise would receive? Is the organization rendering economical service? Is the organization of advantage in handling temporary surpluses resulting from unusually favorable seasons? Is it finding new markets? Is it more effective than the individual in dealing with the buyer? These are suggestive of points to be considered in measuring the worth of an association. In short, weigh it as a business enterprise on the basis of business services performed. To do so properly and fairly requires knowledge on the part of the member of the organization, its program and its results.

SUMMARY

Improvements in marketing come from eliminating weaknesses wherever they are found. Some of them relate to producing better quality products and to handling, grading and packing them more carefully. Others involve better adjustment of production to avoid an unwieldy oversupply. Still others relate to time and place distribution and bargaining, involving better market information, storage, transportation and salesmanship.

Agricultural production is carried on by relatively small units, the individual farms. The farmers organize for marketing to gain advantages from selling on a large scale. Cooperative marketing offers many possibilities for improving marketing methods. However, mistaken ideas regarding the ability of cooperative associations to control prices are held by many. These misconceptions tend to hamper the permanent development of the movement because the failure of organizations to fulfill the unreasonable expectations of some results in disappointment.

Cooperative marketing has for its purpose the getting of better results for its members thru bringing about improvements and effecting economies in marketing, by selling in accordance with market conditions and by aiding farmers in adjusting production to market needs. An organization does not control production even tho it may control a considerable part of the supply of a commodity. The individual growers control acreage. If prices are held too high, planting is stimulated.

Orderly marketing does not consist of the application of a fixed rate of selling. True, orderly marketing is selling in accordance with market conditions, taking into consideration both supply and demand of the future as well as of the present. The aim of cooperative marketing should be to obtain the prices justified by market conditions, rather than to hold prices on some artificial basis.

Cooperative marketing is a business which has possibilities and limitations common to business enterprises. It needs an adequate volume of business, loyal membership support, good management and economical operation to succeed. Cooperative associations should be judged on the basis of service they can perform, not on impossibilities. An understanding on the part of the members of the methods, policies, possibilities and problems of their organization is highly important.

